STIHL®

STIHL GS 461

Instruction Manual

Contents

Guide to Using this Manual	2
Safety Precautions and Working Techniques	2
Sample applications	9
Cutting Attachment	11
Mount guide bar and diamond abrasive chain	11
Tension diamond abrasive chain	13
Check tension of diamond abrasive chain	13
Fuel	14
Fueling	15
Starting / Stopping the Engine	16
Operating Instructions	19
Air Filter System	20
Remove air filter	20
Cleaning the Air Filter	21
Adjusting the Carburetor	21
Spark Arresting Screen in Muffler	22
Spark Plug	23
Rewind Starter	24
Storing the Machine	24
Taking Care of the Guide Bar	24
Checking and Replacing the Chain Sprocket	25
Maintain and sharpen diamond abrasive chain	26
Maintenance and Care	27
Minimize Wear and Avoid Damage	29
Main Parts	30
Specifications	31
Maintenance and Repairs	32
Disposal	32
EC Declaration of Conformity	32

Dear Customer,

Thank you for choosing a quality engineered STIHL product.

It has been built using modern production techniques and comprehensive quality assurance. Every effort has been made to ensure your satisfaction and troublefree use of the product.

Please contact your dealer or our sales company if you have any queries concerning this product.

Your

Dr. Nikolas Stihl

Original Instruction Manual

Printed on chlorine-free paper
Printing inks contain vegetable oils, paper can be recycled.

© ANDREAS STIHL AG & Co. KG, 2014
0458-761-0121-A. VA6.L14.
0000006258_010_GB

STIHL®

This instruction manual is protected by copyright. All rights reserved, especially the rights to reproduce, translate and process with electronic systems.

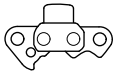
Guide to Using this Manual

Pictograms

Pictograms that appear on the machine are explained in this Instruction Manual.

Depending on the machine and equipment version, the following pictograms may appear on the machine.

Fuel tank; fuel mixture of gasoline and engine oil



Direction of chain travel

Tension diamond abrasive chain

Actuate decompression valve

Water connection, shut-off cock

Symbols in text

WARNING

Warning where there is a risk of an accident or personal injury or serious damage to property.

NOTICE

Caution where there is a risk of damaging the machine or its individual components.

Engineering improvements

STIHL's philosophy is to continually improve all of its products. For this reason we may modify the design, engineering and appearance of our products periodically.

Therefore, some changes, modifications and improvements may not be covered in this manual.

Safety Precautions and Working Techniques

Because the chain of a concrete cutter runs at very high speeds, special safety precautions must be observed to reduce the risk of personal injury.

It is important you read and understand the Instruction Manual before first use and keep the manual in a safe place for future reference. Non-observance of the Instruction Manual may result in serious or even fatal injury.

Comply with national safety regulations issued, e.g. by employers' liability insurance associations, social security institutions, occupational safety and health authorities or other organizations.

Anyone using the power tool for the first time: Have your dealer or other experienced user show you how to operate your machine – or attend a special course in its operation.

Minors are not allowed to work with the power tool – except adolescents above 16 years of age, who were instructed under supervision.

Children, animals and bystanders must remain at a distance.

When the power tool is not in use, put it down so that it does not endanger others. The machine must be secured against unauthorized access.

The user is responsible for avoiding injury to third parties or damage to their property.

Hand-over or lend the engine-driven device to those persons only, who are familiar with this model and its handling – always pass the instruction manual to them as well.

The use of noise emitting machines may be restricted to certain times by national or local regulations.

The machine may only be operated by people who are fit, in good physical health and in good mental condition.

If you have any condition that might be aggravated by strenuous work, check with your doctor before operating a power tool.

If you have a pacemaker: The ignition system of this machine produces an electromagnetic field of very low intensity. An effect on individual pacemaker types cannot be excluded entirely. STIHL recommends that you consult your doctor and the manufacturer of your pacemaker in order to avoid health hazards.

Never work with the machine while under the influence of alcohol, medication or drugs capable of impairing your reaction speed.

Postpone the work if the weather is bad (rain, snow, ice, wind) – **higher risk of accidents!**

The machine may only be used for cutting

The machine must not be used for any other purposes – **risk of accidents!**

It is not suitable for cutting wood or wooden objects.

Asbestos dust is extremely toxic - the machine must therefore **never be used to cut asbestos!**

Only use tools, guide bars, diamond abrasive chains or accessories that have been approved by STIHL for this machine or which are technically equivalent. If you have any questions in this respect, consult a servicing dealer. Use only high quality tools and accessories. Otherwise there may be a risk of accidents or damage to the machine.

STIHL recommends the use of genuine STIHL guide bars, diamond abrasive chains, chain sprockets and accessories. They are specifically designed to match your model and meet your performance requirements.

Do not modify the device – otherwise the safety may be endangered. STIHL excludes all liability for personal injury and damage to property caused while using unauthorized attachments.

Do not use high-pressure cleaners to clean the machine. The hard water jet can damage parts of the machine.

Clothing and equipment

Wear proper protective clothing and equipment.

Clothing must be sturdy and snug-fitting, but allow complete freedom of movement. Wear snug fitting clothing – an overall and jacket combination, do not wear a work coat.

Do not wear clothing that could become trapped in moving parts of the machine – no scarves, no neckties, no jewelry. Tie up and confine long hair.

Wear **safety boots** with steel toe caps and non-slip soles.

WARNING

To reduce the risk of eye injuries, wear tight-fitting safety goggles conforming to standard EN 166. Make sure that the safety goggles fit correctly.

Wear a face shield and make sure it fits correctly. A face mask alone is not sufficient to protect the eyes.

Wear "personal" hearing protection – e. g., ear defenders.

Wear a hard hat wherever there is any risk of falling objects.

While working, dust (for example, crystalline material from the object to be parted-off), vapor and smoke may be produced – **danger for health!**

Always wear a **dust mask** if dust is generated.

If fumes or smoke are anticipated (e. g., when cutting composite materials), wear **respiratory protection**.

Wear sturdy protective gloves made of a resistant material (e. g. leather).

STIHL can supply a comprehensive range of personal protective clothing and equipment.

Transporting the machine

Always stop the engine and attach the chain scabbard.

Carry the machine only by the top handle – guide bar towards the rear – with the hot muffler facing away from the body.

Do not touch hot device parts, in particular the muffler surface – **risk of burns!**

In vehicles: Properly secure the machine to prevent turnover, fuel spillage and damage.

Refuelling

Petrol is an extremely flammable fuel – keep clear of naked flames and fire – do not spill any fuel – no smoking.

Switch off the engine before refuelling.

Never refuel the machine while the engine is still hot – the fuel may spill over – **risk of fire!**

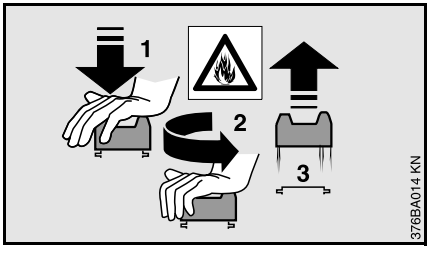
Open the fuel filler cap carefully so that any excess pressure is relieved gradually and fuel does not splash out.

The machine may only be refuelled in a well ventilated place. If fuel has been spilled, clean immediately the engine-driven device – prevent your clothes from being contaminated with fuel, otherwise change clothes at once.

Dust may collect on the engine unit, especially around the carburetor. If dust gets mixed with fuel – risk of fire! Remove the dust from the engine unit regularly.

Look out for leaks! Never start the engine if fuel has been spilled or is leaking – **Fatal burns may result!**

Bayonet filler cap



Never use a tool to open or close the bayonet filler cap. The cap can be damaged and fuel may escape.

Secure the bayonet filler cap tightly after refueling.

Diamond abrasive chain

The diamond abrasive chain, guide bar and chain sprocket must match each other and your concrete cutter.

Use only approved diamond abrasive chains. If unauthorized chains are used, aggressive cutting cannot be ruled out. This may lead to uncontrolled and exceedingly dangerous reaction forces (kickback) in the machine – **risk of fatal injuries!**

Only use diamond abrasive chain for the specified materials, observe diamond abrasive chain codes.

Always cut with water.

Before fitting used diamond abrasive chains, check that they are not cracked, chipped, check also that there are no damaged or missing segments, signs of overheating (discoloration).

Never use diamond abrasive chains that are cracked or have chipped segments. Contact your servicing dealer.

Before starting

Check that concrete cutter is properly assembled and in good condition – refer to appropriate chapters in the Instruction Manual:

- Check the fuel system for leaks, especially the visible parts, e. g., filler cap, hose connections, manual fuel pump (only in machines with a manual fuel pump). In case of leakage and damage, do not start the engine – **risk of fire!** Have the machine serviced by a servicing dealer before using it.
- functional, front hand guard
- Check chain sprocket
- Sprocket nose moves easily
- Correctly mounted guide bar

- The diamond abrasive chain must be suitable for the material to be cut. It must be in good condition and fitted correctly (direction of running).
- Correctly tensioned diamond abrasive chain
- Both the accelerator lever and its locking to move smoothly – the accelerator lever has automatically to return to its idle run position.
- Master control lever can be moved to **STOP** or **0**
- Check that the spark plug boot is secure. A loose boot can lead to flying sparks which may ignite the escaping fuel/air mixture – **risk of fire!**
- Never attempt to modify the controls or safety devices in any way
- Keep the handles dry and clean, free from oil and dirt – important for safe control of the concrete cutter

The concrete cutter should only be used if it is in full working order – **risk of accident!**

Starting the engine

Move at least 3 meters away from the place at which the machine was refueled and never start the machine in enclosed spaces.

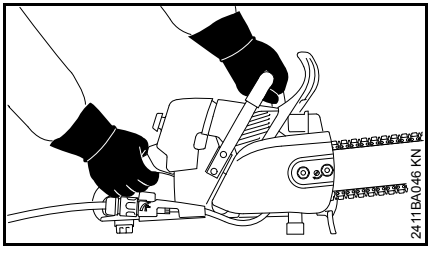
The machine may only be used on level ground. Ensure a firm and secure footing and hold the machine firmly. The diamond abrasive chain must not touch any objects or the ground and must not be in the cut, because it may begin to rotate when the machine is started.

The engine-driven device is operated by a single person only – do not allow any person to stay within the working area – nor with starting.

Do not drop-start the engine – start as described in the Instruction Manual.

Before starting, open the shut-off valve completely and ensure a supply of water to the diamond abrasive chain – do not allow diamond abrasive chain to run dry.

Holding and controlling the machine



Always hold the machine **firmly with both hands:** Right hand on the rear handle – even if you are left-handed. To ensure reliable control, wrap your thumbs tightly around the handlebar and handle.

The object to be parted-off has to be firmly supported. Always guide the device towards the workpiece – never in reverse.

During operation

Ensure you always have a firm and safe footing.

In the event of impending danger or in an emergency, switch off the engine immediately by moving the master control lever to **STOP**or**0**.

The machine is operated by only one person. There should not be any other person within the working area.

Use extreme caution with openings, recesses, etc., someone could be standing behind them – look beforehand.

Never let the machine run unattended.

When the engine is running: The diamond abrasive chain continues to run for some time after the throttle trigger has been released – **Risk of injury due to coasting effect!**

Beware of **slipping** on ice, water, snow or uneven ground!

Don not work while standing on a ladder – not at unstable places – not over your shoulder height – not with one hand only – **risk of accident!**

Keep clear the working area – bear in mind obstacles, holes and pitches.

Never work alone – stay always in earshot to other persons, who can render first aid in case of emergency.

More care and attention than usual are required when wearing ear protection – warning sounds (shouts, alarms, etc.) cannot be heard properly.

Take a break in good time to avoid tiredness or exhaustion – **risk of accidents!**

Keep easily combustible materials away from hot exhaust gases and hot mufflers – **risk of fire!** Mufflers with catalytic converters can become especially hot.

Your power tool produces toxic exhaust fumes as soon as the engine is running. These gases may be colorless and odorless and may contain unburnt hydrocarbons and benzene. Never work with the engine-driven device in closed or poorly vented rooms – even not with devices equipped with a catalyst.

Ensure proper ventilation when working in trenches, hollows or other confined areas. **Toxic fumes can kill!**

With sick feeling, headache, eye defect (for example, shrinking field of vision), hearing impairment, dizziness, fading powers of concentration, stop working immediately – such symptoms may be caused, among others, by high exhaust gas concentration – **risk of accident!**

No smoking when working with or near the machine - **risk of fire!** Combustible fuel vapour may escape from the fuel system.

Examine the diamond abrasive chain periodically at short intervals, check that they are not cracked, chipped, check also that there are no damaged or missing segments, signs of overheating (discoloration).

Never use diamond abrasive chains that are cracked or have chipped segments. Contact your servicing dealer.

In the event of noticeable changes in cutting behavior (e. g., increased vibration, reduced cutting performance), stop work and eliminate the causes of the changes.

- Switch off the engine and wait until the diamond abrasive chain is stationary
- Check condition and correct tension of diamond abrasive chain
- Check sharpness

Never touch the diamond abrasive chain when the motor is running. If the diamond abrasive chain becomes jammed by an object, switch off the engine immediately before attempting to remove the object – **risk of injury!**

To change the diamond abrasive chain, switch off the engine – **risk of injury!**

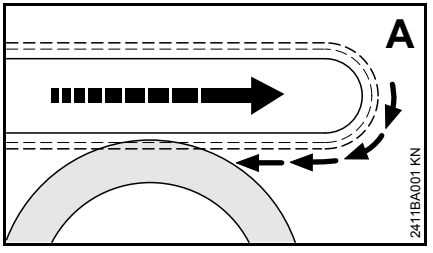
If the machine is subjected to unusually high loads for which it was not designed (e. g., heavy impact or a fall), always check that it is in good condition before continuing work – refer also to the section "Before starting". Check the fuel system for leaks and make sure the safety devices are working properly. Never continue using a power tool that is not in perfect working order. In case of doubt, have the unit checked by your servicing dealer.

Check for correct idling, so that the diamond abrasive chain stops moving when the throttle trigger is released. Check and/or correct the idle setting regularly. Have the machine repaired by a STIHL servicing dealer if the diamond abrasive chain continues to run nevertheless.

Reactive forces

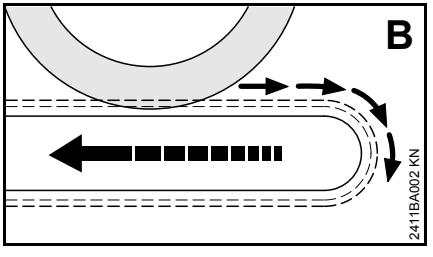
The most frequently occurring reactive forces are pull-in and pushback.

Pull-in (A)

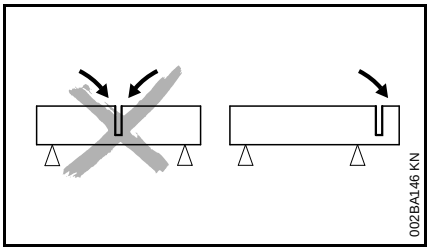


When the diamond abrasive chain on the bottom of the guide bar – overbucking – is jammed or encounters a solid object, the concrete cutter may suddenly be drawn forward to the workpiece.

Pushback (B)



When the diamond abrasive chain on the top of the guide bar – underbucking – is jammed or encounters a solid object, the concrete cutter may suddenly be driven straight back toward the operator.



- Do not allow the guide bar to become jammed
- Always be aware that the object to be cut may move and other factors may cause the cut to close and jam the diamond abrasive chain
- The object to be cut must be secured and supported so that the cut remains open during and after cutting
- Do not twist the guide bar in the cut

Working – parting-off grinding

Ensure sufficient water supply to diamond abrasive chain – do not allow diamond abrasive chain to run dry.

Always wet cut – regardless of the material to be cut.

The diamond abrasive chain must be guided straight in the cut, without wedging. Never exert lateral pressure on the diamond abrasive chain.

Do not use for lateral grinding or scrubbing.

Do not use the starting throttle position for cutting. Engine speed cannot be controlled with the throttle trigger in this position.

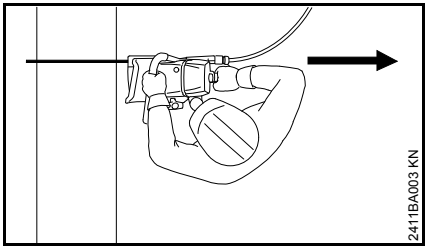
Check the work area. Avoid danger due to damage to pipes and electric power lines.

The machine must not be used in the vicinity of flammable substances and combustible gases.

Do not cut into pipes, metal tanks or other containers if you are not sure that they do not contain any volatile or inflammable substances.

Never leave the machine unattended with the engine running. Stop the engine before leaving the machine unattended (e. g. for breaks).

Work calmly and carefully – in daylight conditions and only when visibility is good. Do not endanger others – stay alert at all times.



Make certain that all parts of your body are well clear of the extended **range of travel** of the diamond abrasive chain.

Only pull concrete cutter out of the object being cut with the diamond abrasive chain running.

Only use concrete cutter for cutting – not for prying or shoveling away objects.

Always decide the cutting direction before positioning the concrete cutter. Do not change the cutting direction. Never push or hit with the device into the cutting gap – do not let the parting-off grinder fall into the cutting depth – **risk of breakage!**

If cutting performance begins to deteriorate, check the sharpness of the diamond abrasive chain, resharpen as needed. To do this, briefly cut through abrasive material, e. g., sandstone, aerated concrete or asphalt.

When working at heights:

- Always use a lift bucket
- Never use the machine while standing on a ladder
- Never use the machine in unsteady locations
- Never cut above shoulder height
- Never use the machine with one hand

Begin cutting with the concrete cutter at full throttle.

At the end of the cut, the concrete cutter is no longer supported by the cutting attachment in the cut. The machine's weight must be borne by the user – **risk of loss of control!**

Keep water and sludge away from alive electrical cables – **risk of electric shock!**

Vibrations

Prolonged use of the power tool may result in vibration-induced circulation problems in the hands (whitefinger disease).

No general recommendation can be given for the length of usage because it depends on several factors.

The period of usage is prolonged by:

- Hand protection (wearing warm gloves)
- Work breaks

The period of usage is shortened by:

- Any personal tendency to suffer from poor circulation (symptoms: frequently cold fingers, tingling sensations).
- Low outside temperatures.
- The force with which the handles are held (a tight grip restricts circulation).

Continual and regular users should monitor closely the condition of their hands and fingers. If any of the above symptoms appear (e.g. tingling sensation in fingers), seek medical advice.

Maintenance and repairs

The machine must be serviced regularly. Do not attempt any maintenance or repair work not described in the Instruction Manual. All other work should be carried out by a servicing dealer.

STIHL recommends that maintenance and repair work be carried out only by authorized STIHL dealers. STIHL dealers receive regular training and are supplied with technical information.

Use only high-quality spare parts. Otherwise, there may be a risk of accidents or damage to the machine. Contact a servicing dealer if in doubt.

STIHL recommends the use of genuine STIHL spare parts. Such parts have been optimized for the machine and the user's requirements.

Before starting any maintenance or repair work and before cleaning the machine, always **stop the engine – risk of injury!** – Exception: adjustment of carburetor and idle speed.

To reduce the **risk of fire** due to ignition outside the cylinder, move the slide control to **STOP** or **0** before turning the engine over on the starter with the spark plug boot removed or the spark plug unscrewed.

Do not service or store the machine near a naked flame – **risk of fire** due to the fuel.

Check fuel cap regularly for tightness.

Use only spark plugs that are in perfect condition and have been approved by STIHL – see "Specifications".

Inspect ignition lead (insulation in good condition, secure connection).

Check that the muffler is in perfect working condition.

Do not use the machine if the muffler is damaged or missing – **risk of fire!** – **Hearing damage!**

Never touch a hot muffler – **risk of burns!**

The condition of the antivibration elements influences vibration behavior – inspect antivibration elements periodically.

Switch off the engine

- to check the chain tension
- to retension the chain
- to change chains
- for remedying malfunctions

Sample applications

Use diamond abrasive chain only with water. Connect concrete cutter to water supply network (min. 1.5 bar).

The water introduced is used to cool the diamond abrasive chain and rinse the cutting attachment, and for binding dust.

After finishing work, run the concrete cutter for a few seconds with water and at operating speed to rinse the cutting attachment.

If the water pressure or water volume is too low, this leads to significantly increased wear and irreparable damage to the cutting attachment – **danger of breakage!**

Objects to be cut

- Must be fully supported
- Must be secured so it cannot roll or slip off
- Must be prevented from vibrating

Severed parts

With openings, recesses, etc., the sequence of the cuts is important. Always make the last cut so that the diamond abrasive chain does not become jammed and so that the operator is not endangered by the severed or separated part.

If necessary, use wedges and if necessary, leave small ridges that hold the part that is to be separated in position. Break these ridges later.

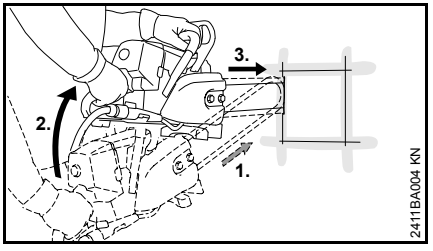
Before finally separating the part, determine:

- how heavy the part is
- how it can move after separation
- whether it is under tension

When breaking out the part, do not endanger assistants.

Plunge-cutting

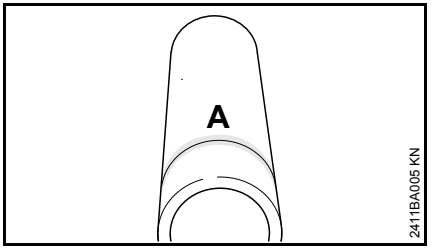
Begin cutting with the concrete cutter at full throttle.



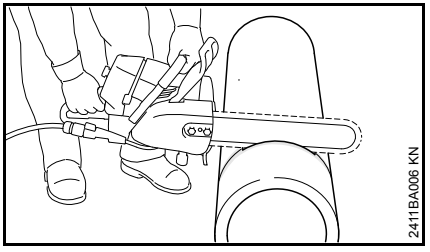
1. Apply the lower portion of the guide bar nose
2. Swing slowly into the plunge-cutting position
3. Make the plunge cut very carefully

When making the plunge cut into existing, narrower joints, proceed with extreme care.

Cut in several passes

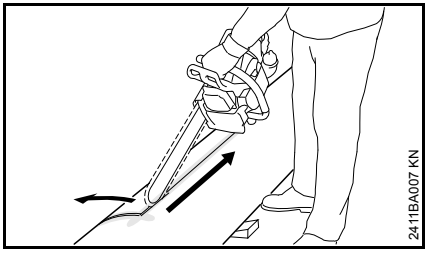


- Mark cutting line (A)



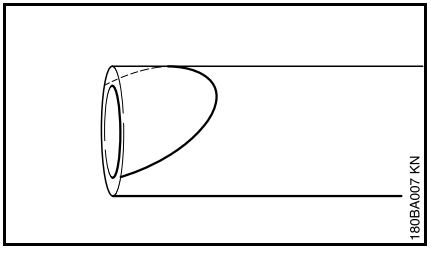
- Work along the cutting line. When making corrections, do not tilt the diamond abrasive chain, always reposition it afresh

Cutting round and hollow bodies



- Secure pipes, round bodies, etc. against rolling away
- Mark a cutting line - when determining the cutting line, avoid reinforcement, especially in the direction of the severing cut
- Make the plunge cut very carefully
- Feed with full cutting depth along the cutting line – for small corrections of direction, do not tilt the diamond abrasive chain, but always position it anew instead – if necessary, use wedges and if necessary, leave small ridges that hold the part that is to be separated in position. Break these ridges later

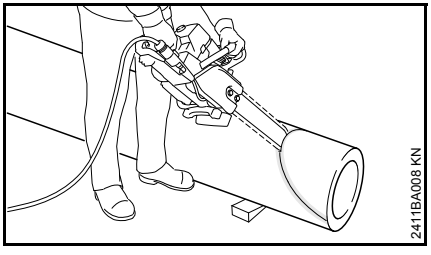
Shaping pipe



- Secure pipes, round bodies, etc. against rolling away
- Mark a cutting line - when determining the cutting line, avoid reinforcement, especially in the direction of the severing cut

⚠ DANGER

Manual cutting along this line requires particular caution and precision.

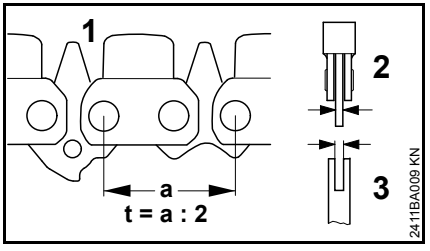


- Cut into pipes, round bodies, etc. in the area at the ends of the cutting line, so that the material does not break away
- Make the plunge cut very carefully at the apex and cut outward on both sides - feed with full cutting depth along the cutting line – for small corrections of direction, do not tilt the diamond abrasive chain, but always position it anew instead – if necessary, use wedges and if necessary, leave small ridges that hold the part that is to be separated in position. Break these ridges later

Cutting Attachment

Diamond abrasive chain, guide bar and chain sprocket make up the cutting attachment.

The cutting attachment that is supplied has been optimized for the concrete cutter.



– The pitch (t) of the diamond abrasive chain (1), chain sprocket and sprocket nose of the Rollomatic guide bar must match
– The drive link gauge (2) of the diamond abrasive chain (1) must be matched to the groove width of the guide bar (3)

When pairing components that are not compatible with each other, the cutting attachment may become damaged beyond repair after only a short period of operation.

Diamond abrasive chain

The correct use of the STIHL diamond abrasive chain ensures economical use and avoids accelerated wear.

The STIHL diamond abrasive chain is suitable for cutting the following materials:

– Concrete
– Reinforced concrete
– General blocks
– Masonry
– Stone pipes
– Abrasive stone*, e. g. asphalt and bricks (sandstone)
– Hard stone*, granite*
– ductile cast iron pipes*

*) Restrictions on power and service life are possible

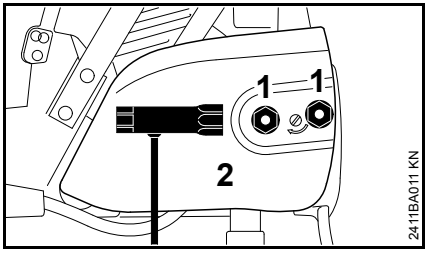
Do not cut any other materials – **risk of accident!**

Chain scabbard

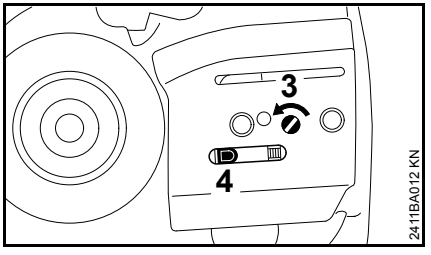
The product contents includes a chain scabbard that is suitable for the bar and chain.

Mount guide bar and diamond abrasive chain

Removing the chain sprocket cover

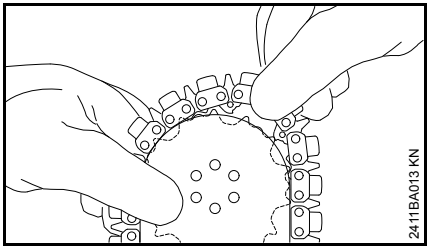


- Unscrew nuts (1) from the studs – nuts are fastened to the chain sprocket cover so that they are secured against loss
- Remove chain sprocket cover (2)

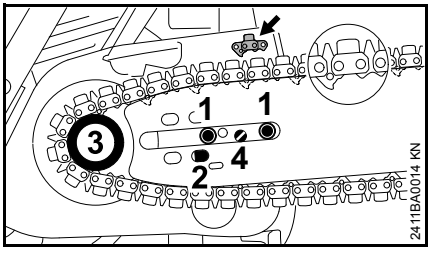


- Turn the screw (3) to the left until the tensioner slide (4) butts against the left end of the housing slot

Fit diamond abrasive chain



- Fit the diamond abrasive chain starting at the nose of the guide bar



- Position the guide bar over the bolts (1) – align drive links so that the position lines up with the symbol (arrow)

WARNING

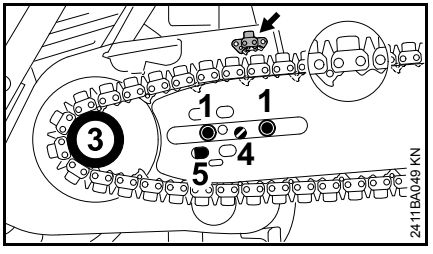
If the drive links are not directionally aligned one behind the other correctly, the diamond abrasive chain and chain sprocket will be damaged beyond repair.

- Position the right locating hole (2) over the peg of the tensioner slide – simultaneously place the diamond abrasive chain over the sprocket wheel (3)
- Turn screw (4) to the right until there is very little diamond abrasive chain sag on the underside of the bar and the lugs of the drive links engage in the bar groove
- Refit the chain sprocket cover – and then screw on the nut by hand until it is fingertight
- Go to chapter "Tensioning the diamond abrasive chain"

Moving the guide bar

Only move the guide bar if the diamond abrasive chain cannot be tensioned properly.

- Removing the chain sprocket cover
- Remove guide bar with diamond abrasive chain
- Fit the diamond abrasive chain starting at the nose of the guide bar



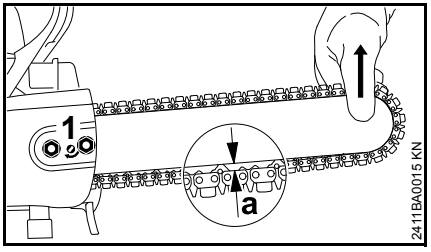
- Position the guide bar over the bolts (1) – align drive links so that the position lines up with the symbol (arrow)

WARNING

If the drive links are not directionally aligned one behind the other correctly, the diamond abrasive chain and chain sprocket will be damaged beyond repair.

- Position the left locating hole (5) over the peg of the tensioner slide – simultaneously place the diamond abrasive chain over the sprocket wheel (3)
- Turn screw (4) to the right until there is very little diamond abrasive chain sag on the underside of the bar and the lugs of the drive links engage in the bar groove
- Refit the chain sprocket cover – and then screw on the nuts by hand until they are fingertight
- Go to chapter "Tensioning the diamond abrasive chain"

Tension diamond abrasive chain

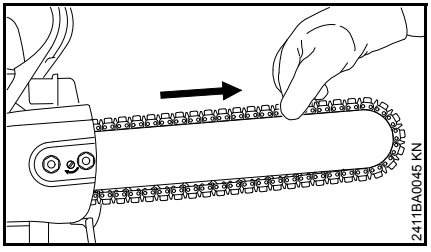


For retensioning during operation:

- Switch off the engine
- Put on protective gloves
- Loosen nuts
- Raise the guide bar at the nose
- Use the screwdriver to turn the screw (1) to the right until the distance (a) = approx. 5 mm

If the distance (a) = approx. 5 mm cannot be set due to an elongated diamond abrasive chain, move guide bar – see installing "guide bar and diamond abrasive chain".

- Raise the guide bar further and tighten the nuts securely

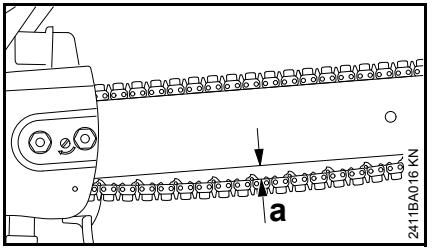


- Check tension of diamond abrasive chain – diamond abrasive chain can be pulled across the guide bar by hand

A new diamond abrasive chain must be retensioned more frequently than one that has been in use already for an extended period.

- Check chain tension frequently – see "Operating Instructions"

Check tension of diamond abrasive chain



- Switch off the engine
- Diamond abrasive chain can sag a maximum of a = 15 mm
- Retension diamond abrasive chain if necessary – see "Tensioning the diamond abrasive chain".

If the diamond abrasive chain sags too much, this leads to significantly increased wear of the cutting attachment.

A new diamond abrasive chain must be retensioned more frequently than one that has been in use already for an extended period.

- Check chain tension frequently – see "Operating Instructions"

Fuel

Your engine requires a mixture of gasoline and engine oil.

WARNING

For health reasons, avoid direct skin contact with gasoline and avoid inhaling gasoline vapor.

STIHL MotoMix

STIHL recommends the use of STIHL MotoMix. This ready-to-use fuel mix contains no benzol or lead, has a high octane rating and ensures that you always use the right mix ratio.

STIHL MotoMix uses STIHL HP Ultra two-stroke engine oil for an extra long engine life.

MotoMix is not available in all markets.

Mixing Fuel

NOTICE

Unsuitable fuels or lubricants or mix ratios other than those specified may result in serious damage to the engine. Poor quality gasoline or engine oil may damage the engine, sealing rings, hoses and the fuel tank.

Gasoline

Use only high-quality **brand-name** gasoline with a minimum octane rating of 90 – leaded or unleaded.

If your machine is equipped with a catalytic converter, you must use unleaded gasoline.

NOTICE

A few tankfuls of leaded gasoline will greatly reduce the efficiency of the catalytic converter.

Gasoline with an ethanol content of more than 10% can cause running problems in engines with a manually adjustable carburetor and should not be used in such engines.

Engines equipped with M-Tronic deliver full power when run on gasoline with an ethanol content of up to 25% (E25).

Engine oil

Use only high-quality two-stroke engine oil – preferably **STIHL HP, HP Super or HP Ultra, which are specially formulated for use in STIHL engines. HP Ultra guarantees high performance and a long engine life.**

These engine oils are not available in all markets.

Use only **STIHL 50:1 two-stroke engine oil** for the fuel mix in models with a catalytic converter.

Mix Ratio

STIHL 50:1 two-stroke engine oil: 50 parts gasoline to 1 part oil

Examples

Gasoline	STIHL engine oil 50:1	
Liters	Liters	(ml)
1	0.02	(20)
5	0.10	(100)
10	0.20	(200)
15	0.30	(300)
20	0.40	(400)
25	0.50	(500)

- Use a canister approved for storing fuel. Pour oil into canister first, then add gasoline and mix thoroughly.

Storing Fuel

Store fuel only in approved safety-type fuel canisters in a dry, cool and safe location protected from light and the sun.

Fuel mix ages – only mix sufficient fuel for a few weeks work. Do not store fuel mix for longer than 30 days. Exposure to light, the sun, low or high temperatures can quickly make the fuel mix unusable.

STIHL MotoMix may be stored for up to 2 years without any problems.

- Thoroughly shake the mixture in the canister before fueling your machine.

WARNING

Pressure may build up in the canister – open it carefully.

- Clean the fuel tank and canister from time to time.

Dispose of remaining fuel and cleaning fluid properly in accordance with local regulations and environmental requirements.

Fueling

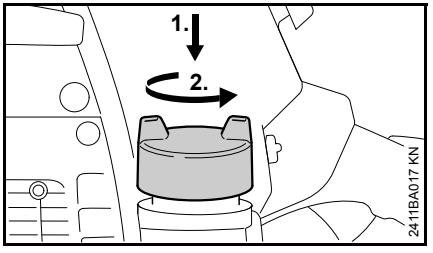
Preparing the machine

- Before fueling, clean the filler cap and the area around it so that dirt cannot fall into the tank
- Always position the machine so that the filler cap is facing upwards

WARNING

Never use a tool to open the bayonet filler cap. This could damage the cap and cause fuel to leak out.

Opening the twist lock

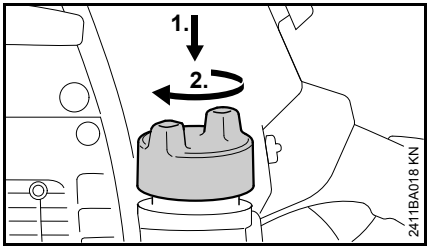


- Press the filler cap down as far as possible by hand, then turn it counterclockwise (approx. 1/8 turn) and remove

Refuel

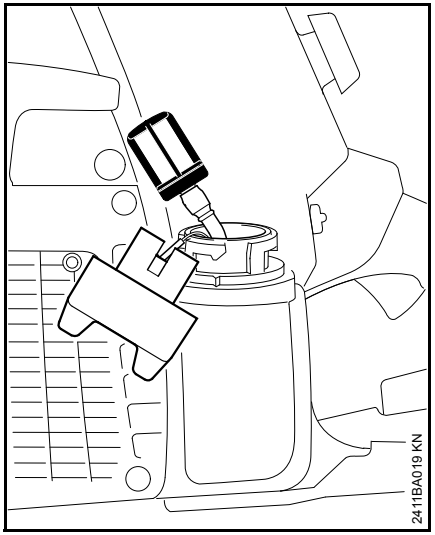
Take care not to spill fuel while fueling and do not overfill the tank. STIHL recommends use of the STIHL filling system for fuel (special accessory).

Closing the filler cap



- Fit the cap and turn it until it engages in the bayonet catch
- Press the cap down as far as possible with your hand and turn it clockwise (approx. 1/8 of a turn) until it engages properly

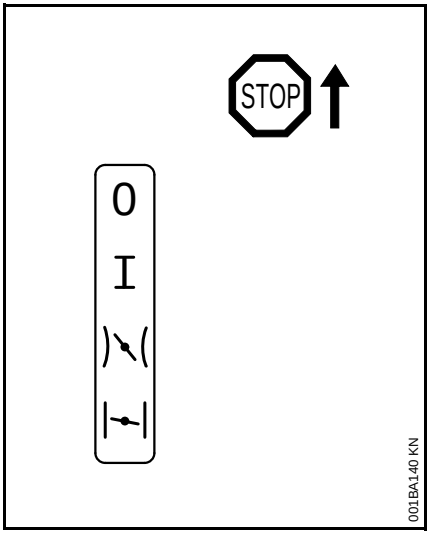
Changing the fuel pickup body every year



- Drain the fuel tank
- Pull the fuel pickup body out of the tank with a hook and disconnect it from the hose
- Connect a new fuel pickup body to the hose
- Return the fuel pickup body to the tank

Starting / Stopping the Engine

The four positions of the Master Control lever



STOP or **0** – engine off – ignition is switched off

Run I – engine is running or can start

Warm start)\(– this position is for starting the warm engine

Cold start |~| – this position is for starting the cold engine

Adjusting the Master Control lever

The throttle trigger lockout and throttle trigger must be pressed simultaneously to adjust the Master Control lever from run **I** to cold start |~|.

To set the Master Control lever to warm start)\(, first set it to cold start |~|, then push the Master Control lever into the warm start)\(position.

Changing to warm start)\(is only possible from the cold start |~| position.

When the throttle trigger is squeezed, the Master Control lever returns from warm start)\(to run **I**.

To switch off the engine, set the master control lever to **STOP** or **0**.

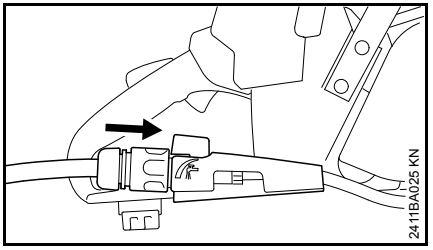
Position cold start |~|

- If the engine is cold
- If the engine stalls during opening of throttle after starting
- If the fuel tank has run empty (engine stalled out)

Position warm start)\(

- If engine is warm (once the engine has been running for approx. one minute)
- When the engine has fired for the first time
- After ventilation of the combustion chamber, if the engine was flooded

Connect concrete cutter to water supply network

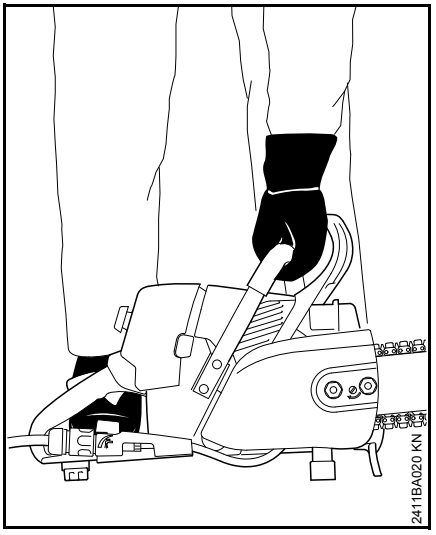


- Connect concrete cutter to water supply network (min. 1.5 bar)
- Before starting, open shut-off valve (arrow) completely

Hold concrete cutter

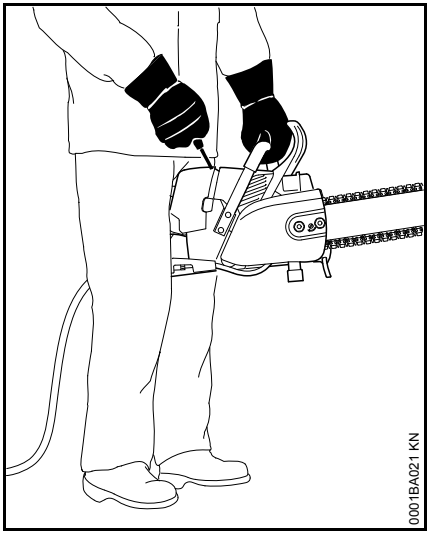
There are two ways to hold the concrete cutter during starting.

On the ground



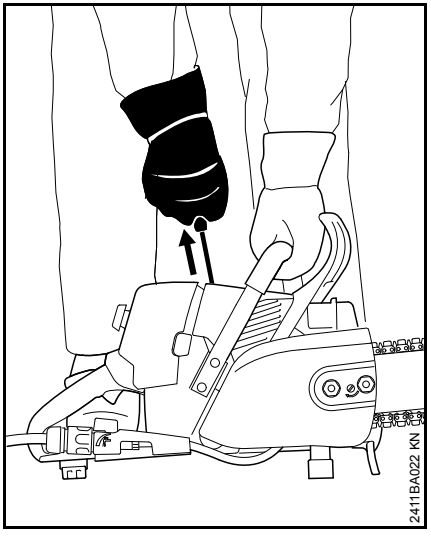
- Place the concrete cutter securely on the ground – assume a steady stance- the diamond abrasive chain must not touch any objects or the ground
- Press the concrete cutter firmly against the ground, holding the front handle with your left hand, thumb wrapped round the handle
- Place your right foot into the rear handle

Between the knees or thighs



- Clamp the rear handle between the knees or thighs
- Grip the handlebar firmly with the left hand – thumb wrapped around the handlebar

Starting

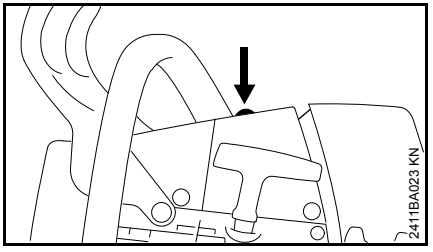


- With the right hand, pull the starter grip slowly until you feel it engage – and then give it a brisk strong pull – simultaneously press down on the handlebar – do not pull the starter rope out all the way – **risk of breakage!** Do not let the starter grip snap back – guide it vertically back into the housing so that the starter rope can rewind properly

Starting the concrete cutter

Before starting, open the shut-off valve completely and ensure a supply of water to the diamond abrasive chain – do not allow diamond abrasive chain to run dry.

Decompression valve

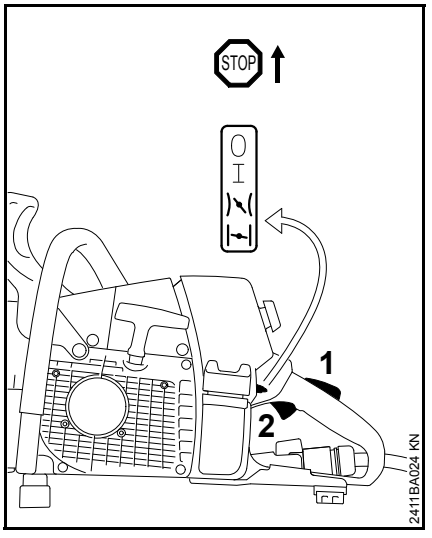


- Press the button, the decompression valve will be opened

The decompression valve is closed automatically when the engine fires for the first time. For this reason, press the button again before each additional starting attempt.

⚠ DANGER

There must not be anyone within the swivel range of the concrete cutter.



- Simultaneously press the throttle trigger lockout (2) and throttle trigger (3) – set the master control lever

Position cold start

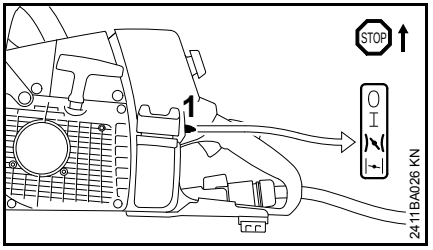
– If engine is cold (even if the engine has stalled during opening of throttle after starting)

Position warm start

– If engine is warm (once the engine has been running for approx. one minute)

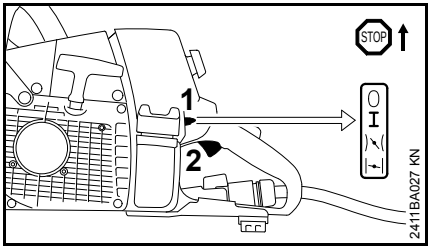
- Hold and start the concrete cutter

When the engine has turned over for the first time



- Move the Master Control lever (1) to the position warm start)\(
- Press the button on the decompression valve
- Hold and continue cranking the concrete cutter

Once the engine is running



- Blip the throttle trigger (2); the Master Control lever (1) jumps to run **I** and the engine begins to idle

The concrete cutter is now ready for use.

At very low temperatures

- Let the engine warm up briefly with the throttle slightly open

Switch off the engine

- Set master control lever to **STOP** or **0**

If the engine does not start

The Master Control lever was not returned to its "warm start" position)\(in time when the engine turned over for the first time and has now flooded.

- Remove the spark plug - see "Spark plug"
- Dry the spark plug
- Set master control lever to **STOP** or **0**
- Crank the engine several times with the starter – to clear the combustion chamber
- Reinstall the spark plug – see "Spark plug"
- Set the Master Control lever to warm start)\(– even if the engine is cold
- Restart the engine

Wet filter

- Dry wet filter if necessary – do not expose to extreme heat
- If the filter is very dirty, clean the filter thoroughly – see "Cleaning the air filter"

Operating Instructions

During the break-in period

A factory new machine should not be run at high revs (full throttle off load) for the first three tank fillings. This avoids unnecessarily high loads during the break-in period. As all moving parts have to bed in during the break-in period, the frictional resistances in the shortblock are greater during this period. The engine develops its maximum power after about 5 to 15 tank fillings.

During work

CAUTION

Always work with water.

CAUTION

Do not make the mixture leaner to achieve an apparent increase in power – this could damage the engine – see "Adjusting the Carburetor".

Check chain tension frequently

The diamond abrasive chain stretches and begins to sag. The drive links on the underside of the bar must not come out of the bar groove by more than 15 mm – the diamond abrasive chain may otherwise jump off the bar – retension the diamond abrasive chain – see "Tensioning the diamond abrasive chain".

If the diamond abrasive chain sags too much, this leads to significantly increased wear of the diamond abrasive chain and chain sprocket – retension the diamond abrasive chain – see "Tensioning the diamond abrasive chain".

A new diamond abrasive chain must be retensioned more frequently than one that has been in use already for an extended period.

After a long period of full-throttle operation

After a long period of full-throttle operation, allow engine to run for a while at idle speed so that the heat in the engine can be dissipated by flow of cooling air. This protects engine-mounted components (ignition, carburetor) from thermal overload.

After finishing work

Short-term storage

Wait for engine to cool down. Keep the machine with a full tank of fuel in a dry place, well away from sources of ignition, until you need it again.

Clean and dry guide bar and diamond abrasive chain, and spray with STIHL multispray – in particular the bearing of the sprocket nose – corrosion protection. Do not spray engine unit!

Long-term storage

See "Storing the machine"

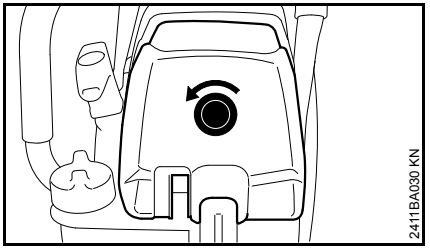
Air Filter System

When dry, STIHL filters attain a long service life.

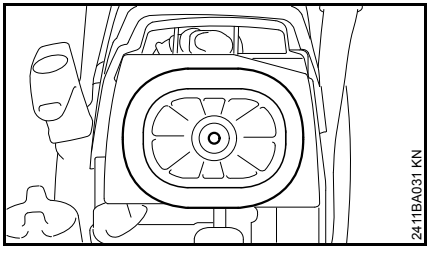
- Always use STIHL filters dry

Fouled air filters will impair engine performance, increase fuel consumption and make the machine more difficult to start.

Remove air filter



- Turn screw plug above the rear handle in the direction of the arrow and remove filter cover – screw plug is secured in the filter cover



- Detach the air filter

Do not remove and clean the auxiliary filter.

Cleaning the Air Filter

If there is a noticeable loss of engine power:

- Dry wet air filter if necessary – do not expose to extreme heat
- If the air filter is very dirty, clean the filter thoroughly

Thorough filter cleaning

- Wash the air filter in STIHL special-purpose cleaner (special accessory) or a clean, non-flammable cleaning liquid (e. g., warm soapy water) – rinse the air filter from inside to out under a water flow – do not use high-pressure washers
- Dry the air filter – do not expose to extreme heat, do not dry with compressed air
- Do not oil the air filter
- Reinstall air filter

Always replace a damaged air filter.

Adjusting the Carburetor

General Information

The carburetor comes from the factory with a standard setting.

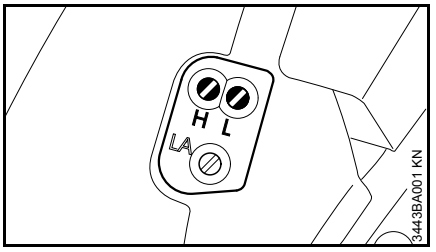
This setting provides an optimum fuel-air mixture under most operating conditions.

With this carburetor it is only possible to correct the adjusting screws within fine limits.

The ignition module limits maximum engine speed. Therefore, maximum engine speed cannot be increased by turning the high speed screw (H) any further clockwise (leaner).

Standard Setting

- Shut off the engine.
- Check the air filter and clean or replace if necessary.
- Check the spark arresting screen (not in all models, country-specific) in the muffler and clean or replace if necessary.

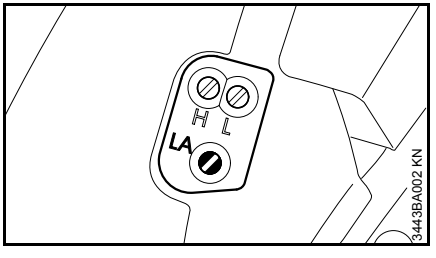


- Turn high speed screw (H) counterclockwise as far as stop (no more than 3/4 turn).
- Turn the low speed screw (L) clockwise as far as stop, then turn it back 1/4 turn.

Adjusting Idle Speed

Before starting, open the shut-off cock fully so that water flows to the diamond abrasive chain – never allow chain to run dry.

- Carry out the standard setting.
- Start and warm up the engine.



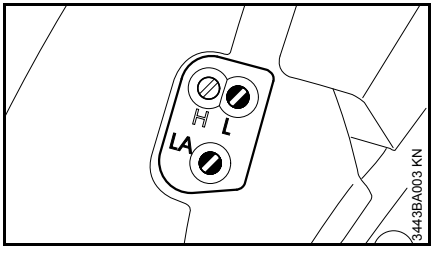
Engine stops while idling or chain runs while engine is idling

- Turn the idle speed screw (LA) clockwise as far as stop or until the chain begins to run – then turn the screw back 1 1/2 turns.

WARNING

If the chain continues moving when the engine is idling, have your machine checked and repaired by your servicing dealer.

Erratic idling behavior, poor acceleration (even though low speed screw is open 1/4 turn)



Idle setting is too lean

- Turn the low speed screw (L) counterclockwise until the engine runs and accelerates smoothly.

It is usually necessary to change the setting of the idle speed screw (LA) after every correction to the low speed screw (L).

Fine Tuning for Operation at High Altitude

A slight correction of the setting may be necessary if engine does not run satisfactorily:

- Carry out the standard setting.
- Warm up the engine.
- Turn high speed screw (H) slightly clockwise (leaner) – no further than stop.

NOTICE

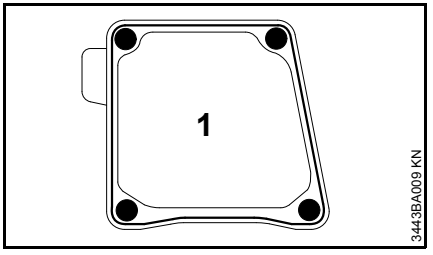
After returning from high altitude, reset the carburetor to the standard setting.

If the setting is too lean there is a risk of engine damage due to insufficient lubrication and overheating.

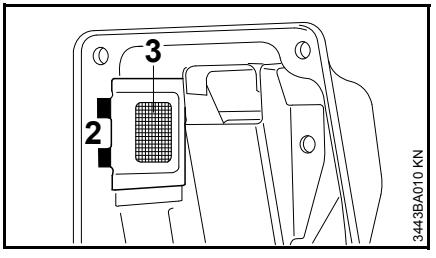
Spark Arresting Screen in Muffler

In some countries, the muffler is fitted with a spark arresting screen.

- If engine performance deteriorates, check the spark arresting screen in the muffler
- Let the muffler cool down



- Remove four screws
- Remove exhaust casing (1) of the muffler



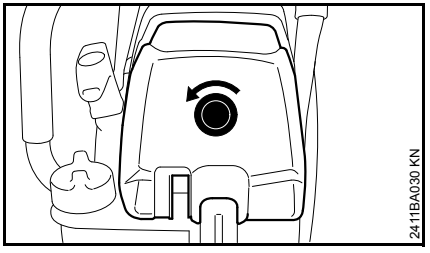
- Bend back the retaining lugs (2)
- Pull out spark arresting screen (3)
- Clean the dirty spark arresting screen, replace if damaged or heavily carbonized
- Refit the spark arresting screen in reverse order of steps

Spark Plug

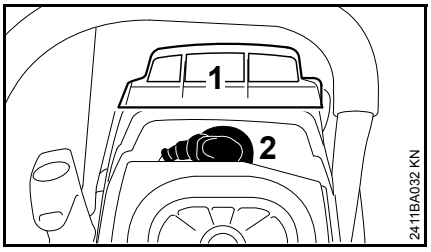
- If the engine is down on power, difficult to start or runs poorly at idle speed, first check the spark plug.
- Fit a new spark plug after about 100 operating hours – or sooner if the electrodes are badly eroded. Install only suppressed spark plugs of the type approved by STIHL – see "Specifications".

Remove the spark plug

- Remove coarse dirt from the machine

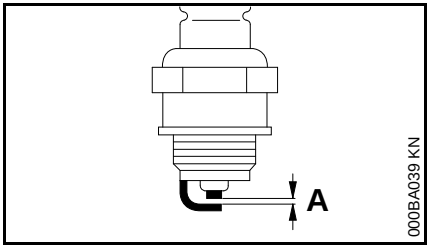


- Turn screw plug above the rear handle in the direction of the arrow and remove filter cover – screw plug is secured in the filter cover



- Lift the air baffle (1) up and off
- Unplug spark plug boot (2)
- Unscrew spark plug

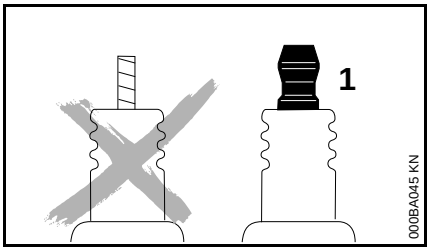
Checking the spark plug



- Clean dirty spark plug.
- Check electrode gap (A) and readjust if necessary – see "Specifications".
- Rectify the problems which have caused fouling of the spark plug.

Possible causes are:

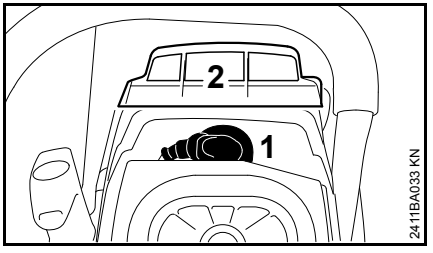
– Too much oil in fuel mix.
– Dirty air filter.
– Unfavorable running conditions.



WARNING

If the spark plug comes with a detachable adapter nut (1), screw the adapter onto the thread and tighten it down **firmly** to reduce the **risk of arcing and fire**.

Installing the spark plug



- Install in the spark plug and tighten
- Press on the spark plug boot (1) firmly
- Insert the air baffle (2) from above
- Mount filter cover

Rewind Starter

To help prolong the wear life of the starter rope, observe the following points:

- Pull the starter rope only in the direction specified.
- Do not pull the rope over the edge of the guide bushing.
- Do not pull out the rope more than specified.
- Do not allow the starter grip to snap back, guide it back into the housing slowly – see chapter on "Starting / Stopping the Engine."

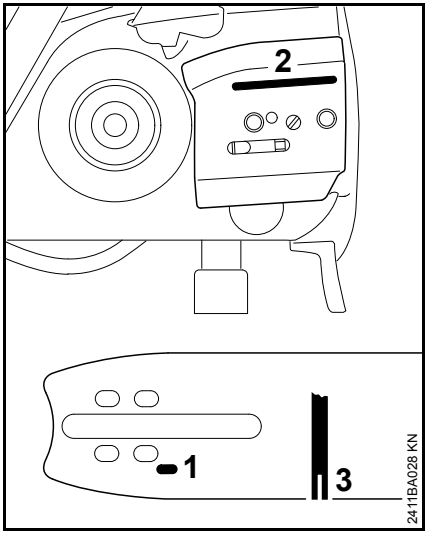
Have a damaged starter rope replaced by your dealer before it breaks completely. STIHL recommends that you have servicing and repair work carried out exclusively by an authorized STIHL servicing dealer.

Storing the Machine

If the machine is to remain out of use for approx. 3 months or more

- Drain and clean the fuel tank in a well ventilated place
- Dispose of fuel in accordance with the regulations and having regard for the environment
- Run the engine until the carburetor is dry, this helps to prevent the carburetor diaphragms sticking together
- Remove, clean and dry diamond abrasive chain and guide bar, and spray with STIHL multispray – in particular the bearing of the sprocket nose – corrosion protection.
- Thoroughly clean the machine - pay special attention to the cylinder fins and air filter
- Store machine in a safe and dry place. Protect against unauthorized use (e. g., by children)

Taking Care of the Guide Bar



- Flip the guide bar – each time the chain is changed – to avoid uneven wear, especially at the sprocket nose and on the bottom
- Periodically clean the water inlet hole (1), water outlet channel (2) and bar groove (3)
- Measure groove depth – using the measuring tool on the file gauge (special accessory) – in the area with the greatest wear

If the groove is not at least 6 mm deep:

- Replace guide bar

Otherwise the drive links will grind against the base of the groove – tie straps will not lie against the bar.

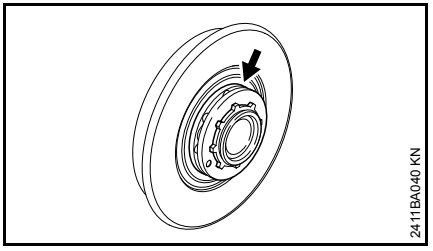
If the guide bar runs in the cut:

- Check guide bar for uneven wear (ridge offset)
- Flip the guide bar, if necessary remove the bore of the guide bar with guide bar straightener

Checking and Replacing the Chain Sprocket

- Remove chain sprocket cover, diamond abrasive chain and guide bar

Replacing rim sprocket

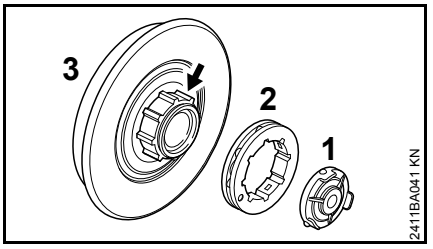


– If the diamond abrasive chain is being replaced, also replace the rim sprocket
– If the wear marks (arrows) are deeper than 0.5 mm – otherwise the service life of the diamond abrasive chain is reduced – use check gauge (special accessory) to test

Using two diamond abrasive chains in alternation helps preserve the chain sprocket.

Removing rim sprocket

If only the rim sprocket is removed, the clutch drum does not need to be removed.

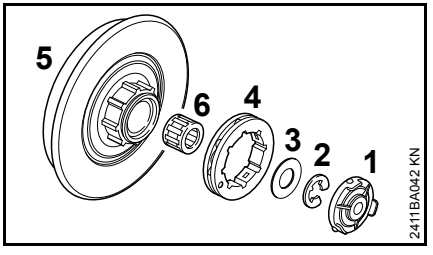


- Remove cap (1)
- Remove rim sprocket (2)
- Inspect transport profile on the clutch drum (3) – if there are also heavy signs of wear, also replace the clutch drum (3)

Installing rim sprocket

- Fit rim sprocket (2)
- Fit cap (1)

Replacing clutch drum



- Remove cap (1)
- Remove rim sprocket (4)
- Use a screwdriver to remove the E-clip (2)
- Remove washer (3)
- Remove clutch drum (5) with needle cage (6) from the crankshaft

Installing the clutch drum

- Clean crankshaft stub and needle cage and lubricate with STIHL lubricant (special accessory)
- Slip the needle cage onto the crankshaft stub.
- Fit clutch drum
- Fit rim sprocket
- Refit washer and E-clip on the crankshaft
- Fit cap

Maintain and sharpen diamond abrasive chain

Maintaining the diamond abrasive chain

After finishing work:

- Remove diamond abrasive chain and guide bar
- Rinse diamond abrasive chain and guide bar with water
- Dry diamond abrasive chain and guide bar
- Spray diamond abrasive chain and guide bar with STIHL multispray – in particular the bearing of the sprocket nose – corrosion protection

Check diamond abrasive chain regularly

- Check the diamond abrasive chain for cracks and damaged rivets
- Replace damaged or worn chain components – contact a servicing dealer

Never use a dull or damaged diamond abrasive chain – this leads to increased physical strain, increased vibration load, unsatisfactory results and increased wear.

If cutting performance begins to deteriorate, check the sharpness of the diamond abrasive chain, resharpen as needed. To do this, briefly cut through abrasive material, e. g., sandstone, aerated concrete or asphalt.

Maintenance and Care

The following information applies under normal operating conditions. The specified intervals must be shortened accordingly when working for longer than normal or under difficult cutting conditions (extensive dust, etc.).		Before starting work	At the end of work and/or daily	Whenever tank is refilled	Weekly	Monthly	Yearly	If faulty	If damaged	As required
Complete machine	Visual inspection (condition, leaks)	X		X						
	Clean		X							
Throttle trigger, throttle trigger lockout, master control lever	Function tests	X		X						
Manual fuel pump (if present)	Check	X								
	Have repaired by a specialist dealer[1)]								X	
Fuel pickup body in fuel tank	Check							X		
	Replace						X		X	X
Fuel tank	Clean					X				
Water supply, chain lubrication	Check	X								
Diamond abrasive chain	Check, pay attention to sharpness	X		X						
	Check chain tension, retension if necessary; also check every 15 minutes while working, retension if necessary	X		X						
	Sharpen									X
	clean and spray with STIHL multispray		X							
Guide bar	check (wear, damage, action of sprocket nose)	X								
	clean and spray with STIHL multispray		X							
	Flip									X
	Deburr				X					
	Replace								X	X
Chain sprocket	Check, replace if necessary	X[3)]						X	X	
Air filter	Clean							X		X
	Replace								X	

The following information applies under normal operating conditions. The specified intervals must be shortened accordingly when working for longer than normal or under difficult cutting conditions (extensive dust, etc.).		Before starting work	At the end of work and/or daily	Whenever tank is refilled	Weekly	Monthly	Yearly	If faulty	If damaged	As required
Anti-vibration elements	Check	X						X		
	Have them replaced by a servicing dealer[1)]								X	
Cooling air intake slits	Clean		X							
Cylinder fins	Clean		X			X				
Carburetor	Check idle adjustment – chain must not rotate	X		X						
	Set idle speed									X
Spark plug	Adjust electrode gap							X		
	Replace after 100 hours operation									
All accessible screws, nuts and bolts (not adjusting screws)[2)]	Retighten									X
Spark arresting screen (present only in some countries)	Have checked by a specialist dealer[1)]							X		
	Have cleaned by a specialist dealer, or replaced if necessary[1)]								X	
Exhaust bore	decarbonise after 139 hours of operation, subsequently after every 150 hours of operation									X
Safety information label	Replace								X	

1) STIHL recommends STIHL servicing dealers

2) During initial use, tighten the cylinder block screws after 10 to 20 hours of operation

3) If diamond abrasive chain is mounted or changed

Minimize Wear and Avoid Damage

Observing the instructions in this manual helps reduce the risk of unnecessary wear and damage to the power tool.

The power tool must be operated, maintained and stored with the due care and attention described in this owner's manual.

The user is responsible for all damage caused by non-observance of the safety precautions, operating and maintenance instructions in this manual. This includes in particular:

- Alterations or modifications to the product not approved by STIHL.
- Using tools or accessories which are neither approved or suitable for the product or are of a poor quality.
- Using the product for purposes for which it was not designed.
- Using the product for sports or competitive events.
- Consequential damage caused by continuing to use the product with defective components.

Maintenance Work

All the operations described in the "Maintenance Chart" must be performed on a regular basis. If these maintenance operations cannot be performed by the owner, they should be performed by a servicing dealer.

STIHL recommends that you have servicing and repair work carried out exclusively by an authorized STIHL servicing dealer. STIHL dealers are regularly given the opportunity to attend training courses and are supplied with the necessary technical information.

If these maintenance operations are not carried out as specified, the user assumes responsibility for any damage that may occur. Among other parts, this includes:

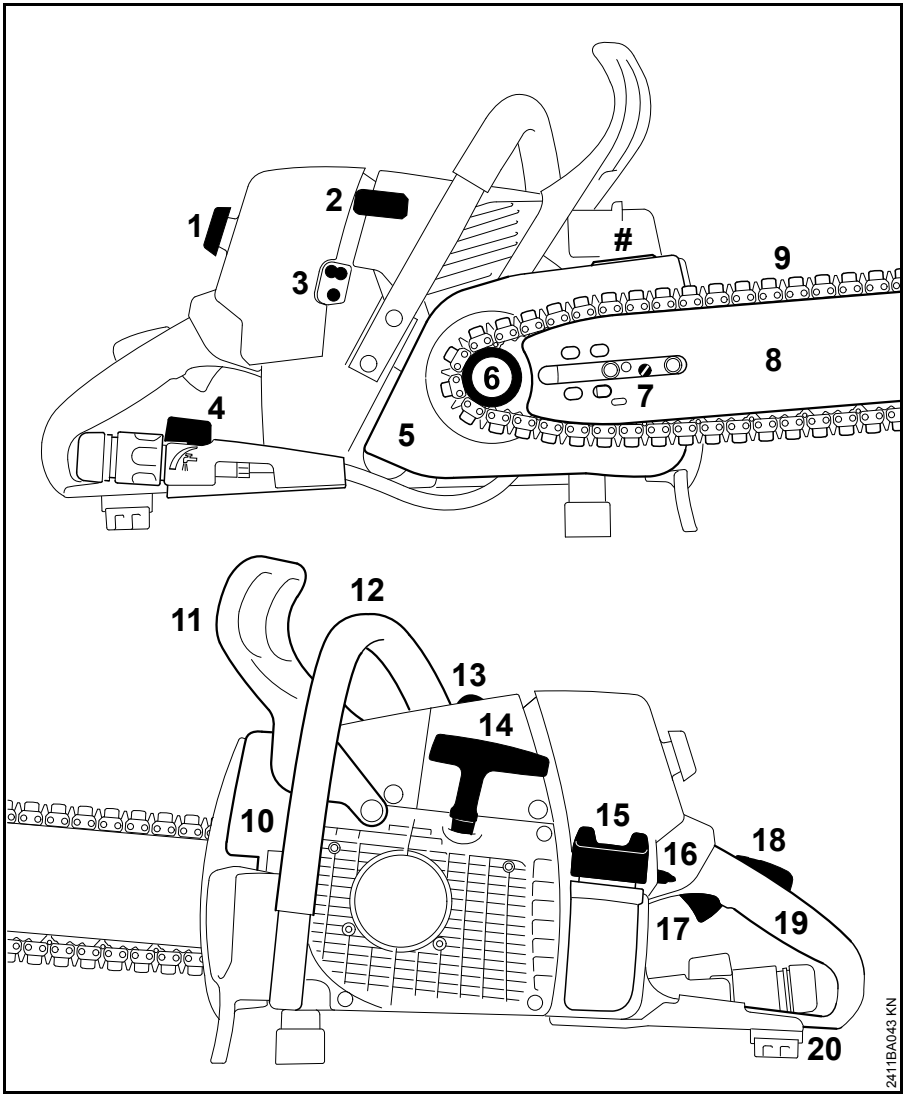
- Damage to the engine due to neglect or deficient maintenance (e.g. air and fuel filters), incorrect carburetor adjustment or inadequate cleaning of cooling air inlets (intake ports, cylinder fins).
- Corrosion and other consequential damage resulting from improper storage.
- Damage to the machine resulting from the use of poor quality replacement parts.

Parts Subject to Wear and Tear

Some parts of the power tool are subject to normal wear and tear even during regular operation in accordance with instructions and, depending on the type and duration of use, have to be replaced in good time. Among other parts, this includes:

- Diamond abrasive chain, guide bar
- Drive components (clutch, clutch drum, chain sprocket)
- Filters (air, fuel)
- Rewind starter
- Spark plug
- Components of antivibration system

Main Parts



1 Twist lock
2 Spark plug boot
3 Carburetor adjusting screws
4 Water connection, shut-off cock
5 Chain sprocket cover
6 Chain sprocket
7 Chain tensioner
8 Guide bar
9 Diamond abrasive chain
10 Muffler
11 Front hand guard
12 Front handle (handlebar)
13 Decompression valve
14 Starter grip
15 Fuel filler cap
16 Master Control lever
17 Throttle trigger
18 Throttle trigger lockout
19 Rear handle
20 Rear hand guard
Serial number

Specifications

Engine

STIHL single cylinder two-stroke engine

Displacement:	76.5 cm^3
Cylinder bore:	52 mm
Piston stroke:	36 mm
Engine power according to ISO 7293:	4.3 kW (5.8 HP) at 9800 rpm
Idling speed:	2500 rpm
Cut-off speed:	13500 rpm

Ignition system

Electronic magneto ignition

Spark plug (suppressed):	Bosch WSR 6 F, NGK BPMR 7 A
Electrode gap:	0.5 mm

Fuel system

All-position diaphragm carburetor with integral fuel pump

Fuel tank capacity: 780 cm^3 (0.78 l)

Weight

dry, without cutting attachment: 7.6 kg

Bar and chain GS 461

The actual cutting length can be less than the specified cutting length.

Guide bar Rollomatic G

Cutting lengths (3/8" pitch)	30, 40 cm
Groove width:	1.6 mm

Diamond abrasive chains 3/8"

36 GBM, type 3210

Pitch:	3/8" (9.32 mm)
Drive link gauge:	1.6 mm

Chain sprockets

8-tooth for 3/8" (rim sprocket)

Sound and vibration levels

When determining sound and vibration levels, idling and full load are taken into account in a ratio of 1:6.

For further details concerning compliance with the Physical Agents Directive Vibration 2002/44/EC, see www.stihl.com/vib.

Sound pressure level L_{peq} to ISO 11201

105 dB(A)

Sound power level L_{weq} to ISO 11201

115 dB(A)

Vibration level $a_{hv,eq}$ to ISO 19432

	Handle, left	Handle, right
GS 461	4.5 m/s^2	4.0 m/s^2

The K-factor in accordance with Directive 2006/42/EC is 2.5 dB(A) for the sound pressure level and sound power level; the K-factor in accordance with Directive 2006/42/EC is 2.0 m/s^2 for the vibration measurement.

REACH

REACH is an EC regulation and stands for the Registration, Evaluation, Authorisation and Restriction of Chemical substances.

For information on compliance with the REACH regulation (EC) No. 1907/2006 see www.stihl.com/reach.

Maintenance and Repairs

Users of this machine may only carry out the maintenance and service work described in this user manual. All other repairs must be carried out by a servicing dealer.

STIHL recommends that you have servicing and repair work carried out exclusively by an authorized STIHL servicing dealer. STIHL dealers are regularly given the opportunity to attend training courses and are supplied with the necessary technical information.

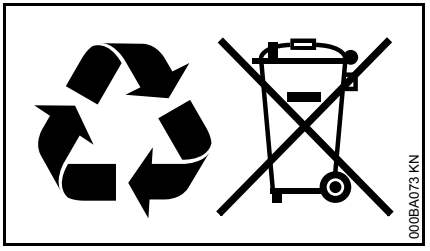
When repairing the machine, only use replacement parts which have been approved by STIHL for this power tool or are technically identical. Only use high-quality replacement parts in order to avoid the risk of accidents and damage to the machine.

STIHL recommends the use of original STIHL replacement parts.

Original STIHL parts can be identified by the STIHL part number, the STIHL logo and the STIHL parts symbol (the symbol may appear alone on small parts).

Disposal

Observe all country-specific waste disposal rules and regulations.



STIHL products must not be thrown in the garbage can. Take the product, accessories and packaging to an approved disposal site for environment-friendly recycling.

Contact your STIHL servicing dealer for the latest information on waste disposal.

EC Declaration of Conformity

ANDREAS STIHL AG & Co. KG
Badstr. 115
D-71336 Waiblingen

hereby confirms that

Model:	Concrete cutter
Make:	STIHL
Type:	GS 461
Serial identification number:	4252
Displacement:	76.5 cm^3

conform to the specifications of Directives 2006/42/EC and 2004/108/EG and have been developed and built in compliance with the versions of the following standards valid at the time of the production date:

EN ISO 12100, EN 55012, EN 61000-6-1

The technical documentation has been retained by:

ANDREAS STIHL AG & Co. KG
Product approval

The year of construction and the serial number are shown on the machine.

Waiblingen, 20.08.2014

ANDREAS STIHL AG & Co. KG

p p.

Thomas Elsner

Head of Product Group Management

CE

0458-761-0121-A

englisch

GB

www.stihl.com

0458-761-0121-A